

Drought Mitigation Plan 2015



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Revised: 5/4/15

City of Rocklin - 2015 Drought Mitigation Plan

Situation

As California enters its fourth year of a severe drought, Placer County Water Agency (PCWA), the City of Rocklin's water provider, and the State of California have sent forth further water restrictions. The City is required to conserve 25% water usage in 2015 over 2013, the last unrestricted water year. There is a distinct possibility that the City will be asked to conserve up to 36%.

The City's 2014 water reductions were in all areas of water usage (street landscaping, parks, and facilities); however by converting street turf landscaping to drought tolerant plantings the City realized the highest amount of the City's water savings. The City now needs to focus on its parks to meet the increased conservation requirements.

At the City of Rocklin, Department of Public Services, water conservation has been a key focus over many years. The Department of Public Services has been:

- Installing low-flow shower and faucet fixtures
- Reducing street landscape turf
- Changing out spray sprinklers for heads and drip systems with greater water efficiency.

To date, over eleven years, more than 60,000,000 gallons have been saved.

Recommended Solution

The City partnered with Placer County Water Agency (PCWA) to formally adopt the plan below. Adoption of the City's plan by PCWA is required by Governor Brown's Executive Order B-29-15, dated March 27, 2015. PCWA can also submit the City's plan as part of a grant package for the re-landscaping of areas of turf lost to the drought.

The recommended focus of this solution is a two phased approach with regular monitoring between phases. The original plan contained a monitoring phase where if 25% reductions were not realized or if additional restrictions were imposed; the City would proceed to Phase II. However, with the likelihood that the City will be required to conserve additional water, it has moved to Phase II.

Among other strategies, the plan phases highlight areas of turf in parks that have been selected to let dry out. These areas were carefully selected using the following criteria:

Phase I

- Turf that is in a poor state of repair and needs to be replaced
- Turf that is not generally used as a play area, i.e. next to a street, or on a hillside

Phase II

- Small areas of turf that are near larger areas that can be used for play

Phase I - Administrative and Procedural

Immediately effective and put into place on March 27, 2015 were the following administrative policies:

Continue city-wide splash park shut-down

The City's splash parks utilize treated water, and the water is not re-circulated and runs to waste on concrete and other surfaces.

One hour, or less, response time for reported leaks

The City has implemented a 24 hours a day on-call program for its Irrigation Technicians to respond to reports of water leaks for City owned property and facilities.

Limit overhead watering to between the hours of 9pm and 9am

To reduce water loss due to evaporation during the warmest times of the day, and to comply with recent mandates, the City has reduced the hours of overhead watering.

Phase I - Action Plan

On April 15, 2015, after City Council presentation of the drought mitigation plan, implementation of the Action Plan began.

Discontinue water to remaining turf used for street landscaping

As part of the 2014 drought mitigation much of the turf used for street landscaping was converted to drought tolerant plantings. Due to budget restrictions some sections remain; these sections will be allowed to dry-out. If the turf sections contain trees, a sprinkler head will be directed to the tree, and the remaining heads will be sealed off.

Discontinue new City property planting projects

The City had planned several new planting projects as part of capital improvement projects, the change out of turf to drought tolerant street plantings, and turf conversion to drought-tolerant turf. Although all plantings would save the City water usage over the long-run, the amount of water needed to establish new plantings is too much for this stage of drought.

- Delayed Capital Improvement Projects
 - a. Sierra College & I 80 Interchange
 - b. Rocklin Road & I 80 Interchange
- Delayed conversion to drought tolerant plantings
 - a. Street turf landscape (allowed to dry-out)
 - b. Kathy Lund field replacement with Bermuda grass

- c. Woodside Park turf replacement of bad turf

Water reduction across street landscaping and parks via computerized irrigation control system

All water schedules will be cut back by 20% of watering minutes. Watering will be shut-off on days where precipitation is in excess of 1/8". Irrigation Technicians will manually manage dry spots.

Reduce water usage on turf in City Parks (Go to: [Appendix 1](#) pages 7-35)

- Dry-out of unusable park turf

Rocklin's parks are beautiful assets that are in use by the community all year. The drought mitigation team reviewed the parks with the intention of continuing to provide green turf play space to the turf areas with the heaviest usage. In Phase I certain areas were determined as "unusable turf" and these areas will be allowed to dry-out while large play areas, and play areas near play equipment will be kept green. The areas selected in Phase I as unusable turf include:

- a. Hillsides
- b. Small unused areas
- c. Frontage
- d. Pocket parks

Where trees are included in these turf areas, one sprinkler head will be directed towards a tree, watering will be reduced to two days per week, and all other sprinkler heads will be capped.

- Use water retention turf product on remaining park turf

All usable turf will be treated in spring and late summer with Hydretain. Hydretain is a new technology designed to reduce the watering requirements of plants and turf. Hydretain contributes to a more complete usage of water that is applied by rainfall or irrigation. This will be the first time the City will use this product that reports "up to 50%" water conservation. Because of local climate and soil conditions the City is hoping to see a 30% water savings due to the use of this product.

Phase I - Estimated Results

Phase I Conservation Efforts for 2015		
Water Usage for 2013 – 330,325,776 Gallons		
Description	Projected % Water Savings	Projected # Gallons Saved
Streetscaping - Discontinue watering turf	.51%	1,692,488
Parks - Dry-out, unusable, and bad turf	8.82%	29,139,759
Parks - Reduce water cycles & use Hydretain	15.27%	50,439,349
City facilities landscape – Reduce water cycles & use Hydretain	.17%	572,237
Splash parks shut-down	3.77%	12,450,000
2014 Landscape improvements	8.20%	27,073,860
2014 Facility improvements	.09%	295,460
Total Estimated Reductions	36.83%	121,663,153

Phase II – Additional Reductions

Effective if/when water reductions do not equal 25% after 2 full months of Phase I reductions

- Increase unusable park space determination by 5%

Phase II Conservation Efforts for 2015		
Water Usage for 2013 – 330,325,776 Gallons		
Description	Projected % Water Savings	Projected # Gallons Saved
Parks - Dry-out additional 5%, unusable, and bad turf	1.87%	8,250,300
Phase I reductions	36.83%	121,663,153
Total Estimated Reductions	38.70%	129,913,453

Additional Savings Opportunities

- Further dry-out of turf in parks with the exception of turf used for league practice and game fields.

Implementation

Implementation is managed by the Public Services Department with action items throughout the City.

Director of Public Services	Sponsor, Advisor
Public Services Business Manager	Project Manager, Communications, Performance Measurement
Deputy Director Public Services	Co-Project Manager, Advisor
Parks Supervisor	Implementation, Advisor, Spokesperson
Street Landscape Supervisor	Implementation, Advisor, Spokesperson
Sr. Irrigation Maintenance Tech	Implementation, Advisor
City - Special Projects Manager	Press Releases

Turn off Water to “Unusable Turf” Areas

- **Parks** (Pages 7 – 36)
 - Hillsides
 - Small unused areas
 - Frontage areas
- **Street Landscaping and Pocket Parks** (Pages 37 – 47)



April 17, 2015



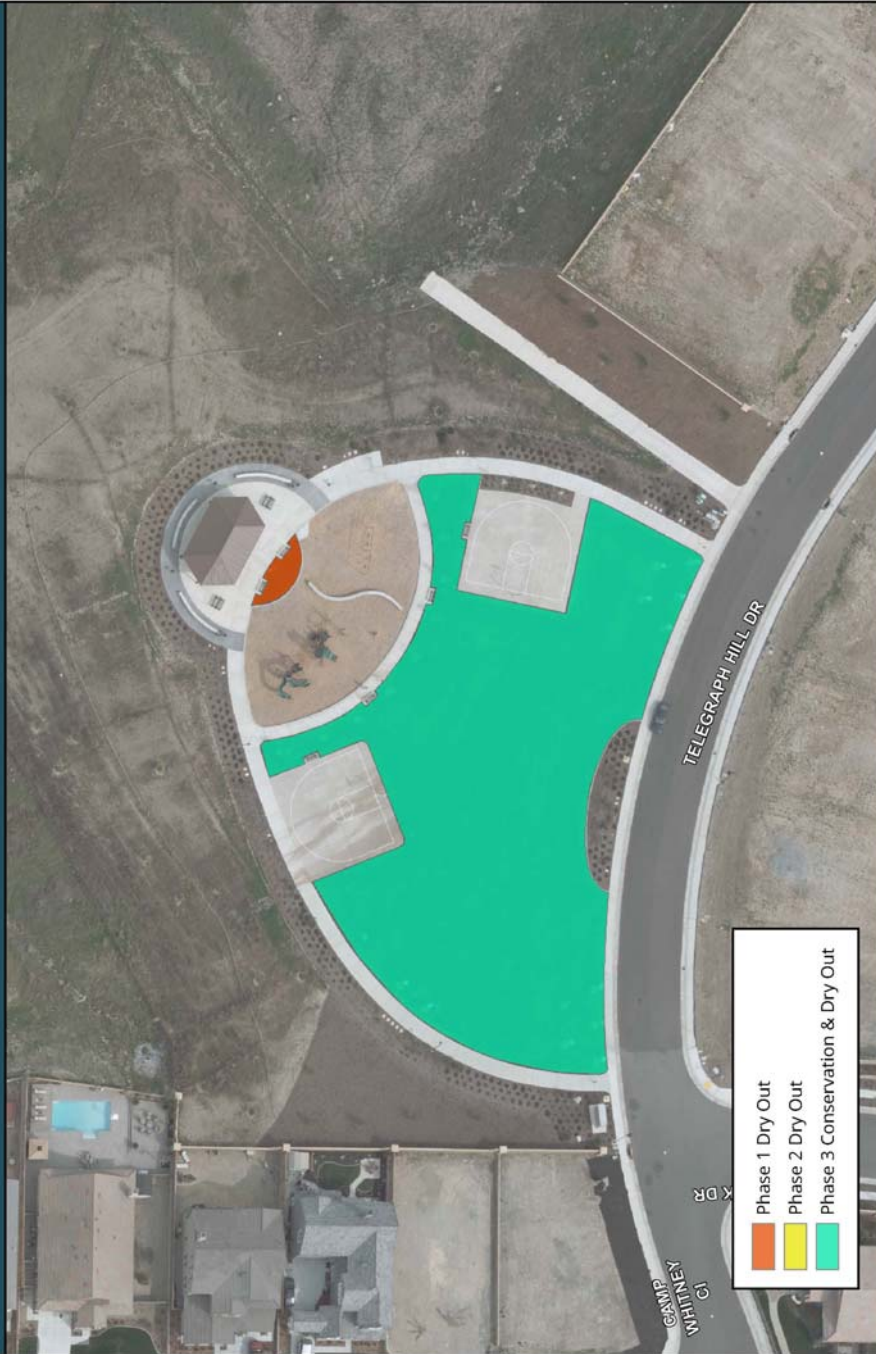
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April 17, 2015



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Brigham & Hawes Park



Clarke Dominguez Park









Heritage Park











Margaret Azevedo Park





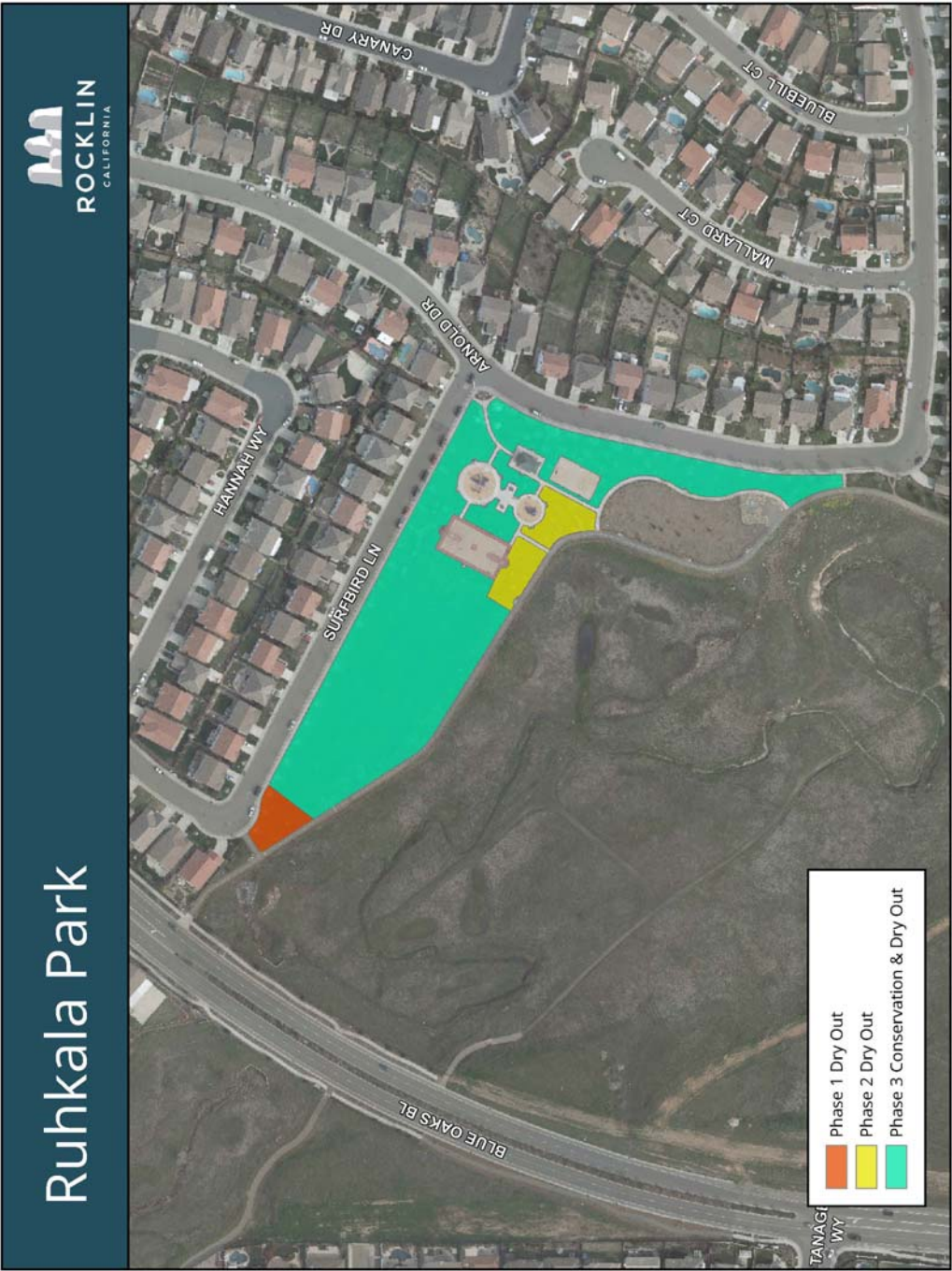


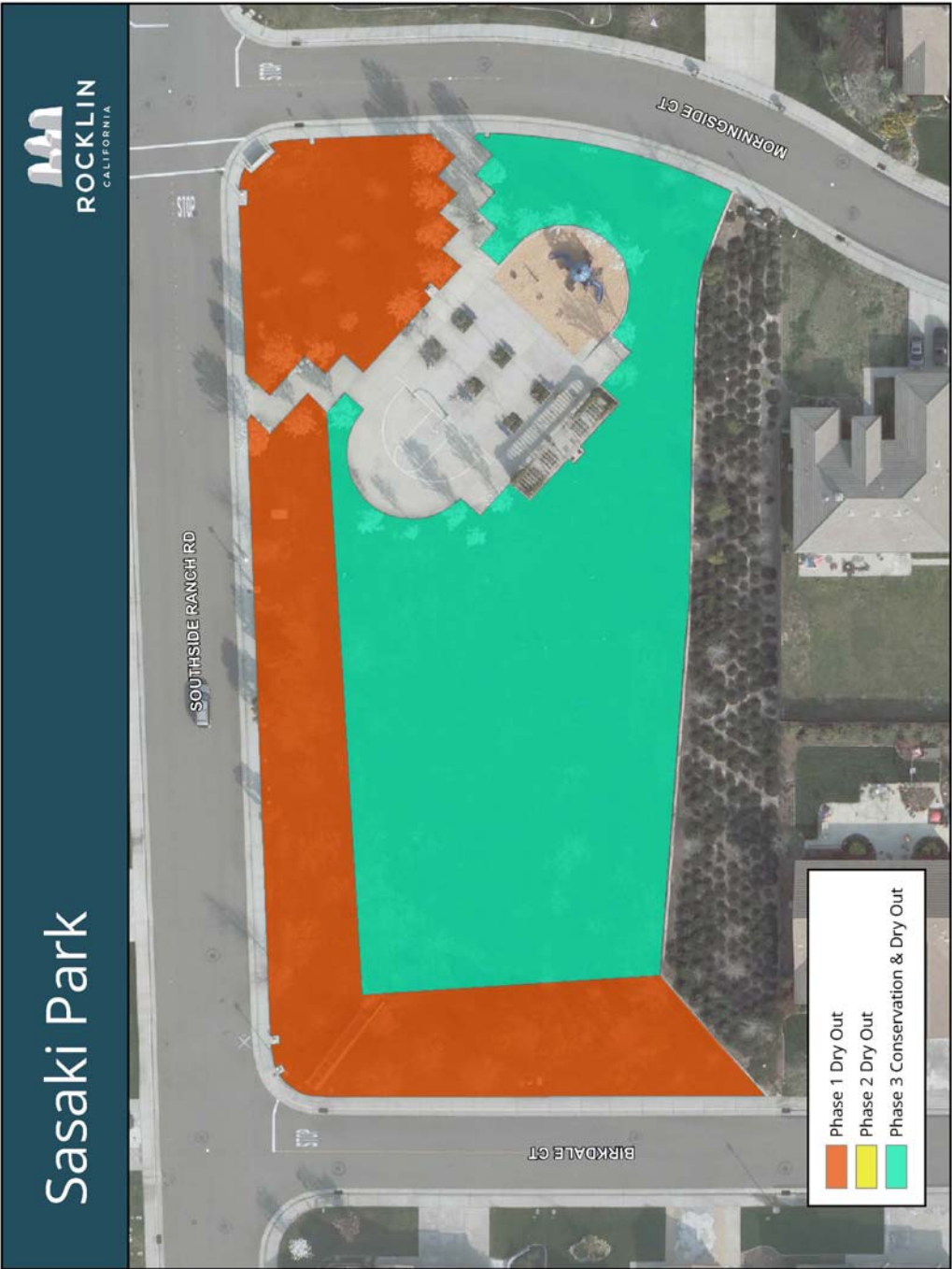












Sierra Meadows Park





Sunset East Park



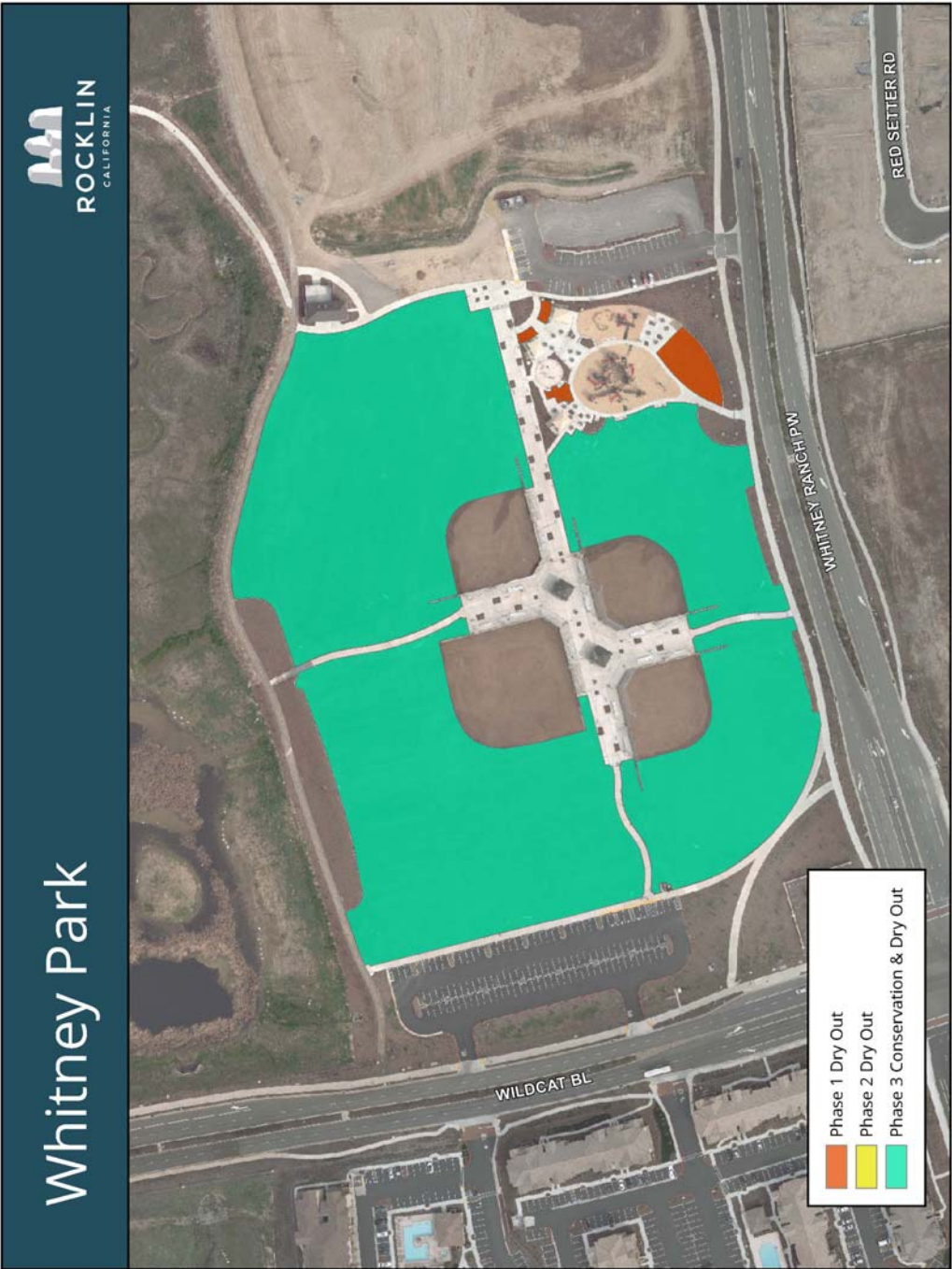


Vista Grande Park



Wesley Park

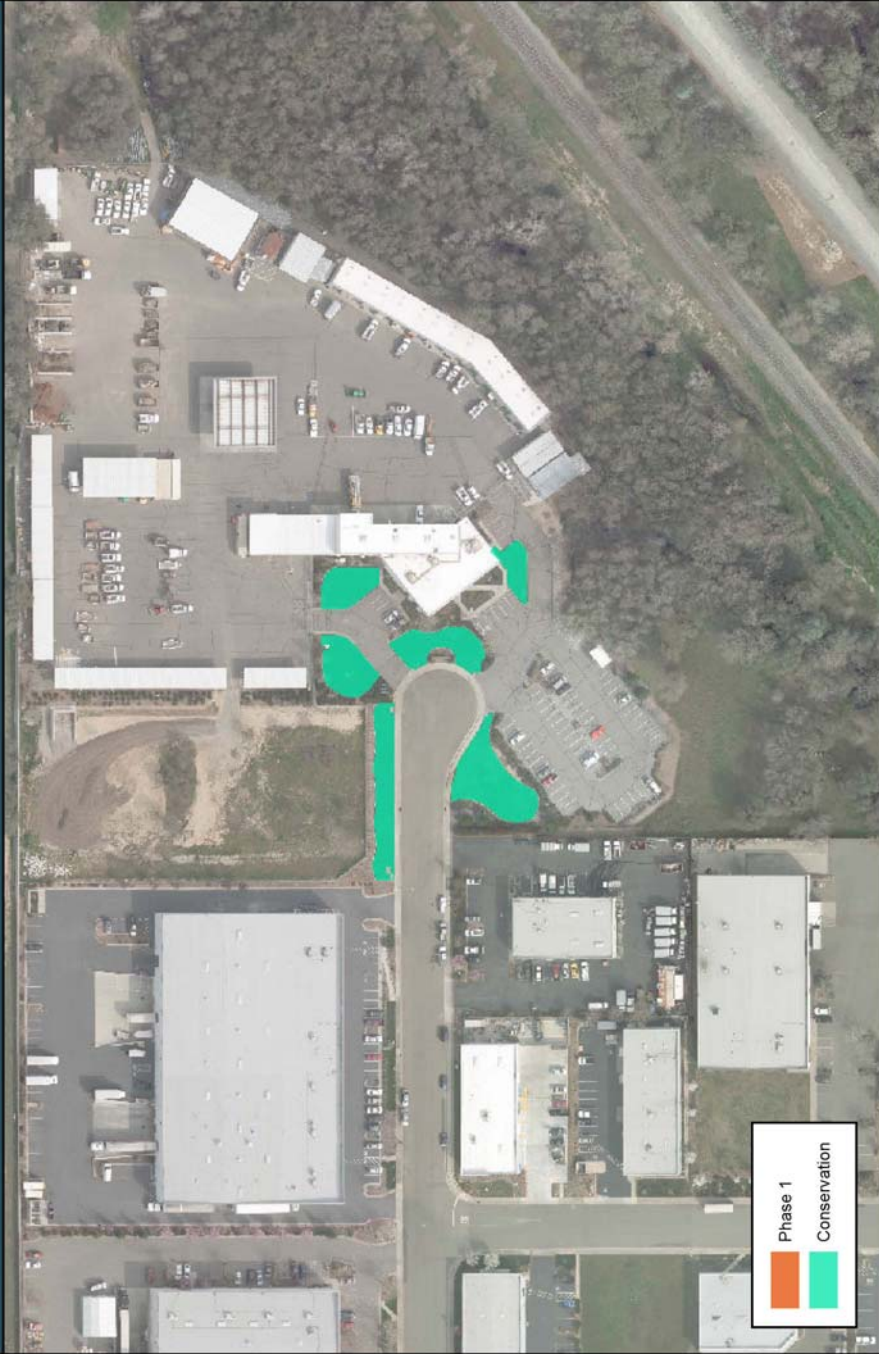




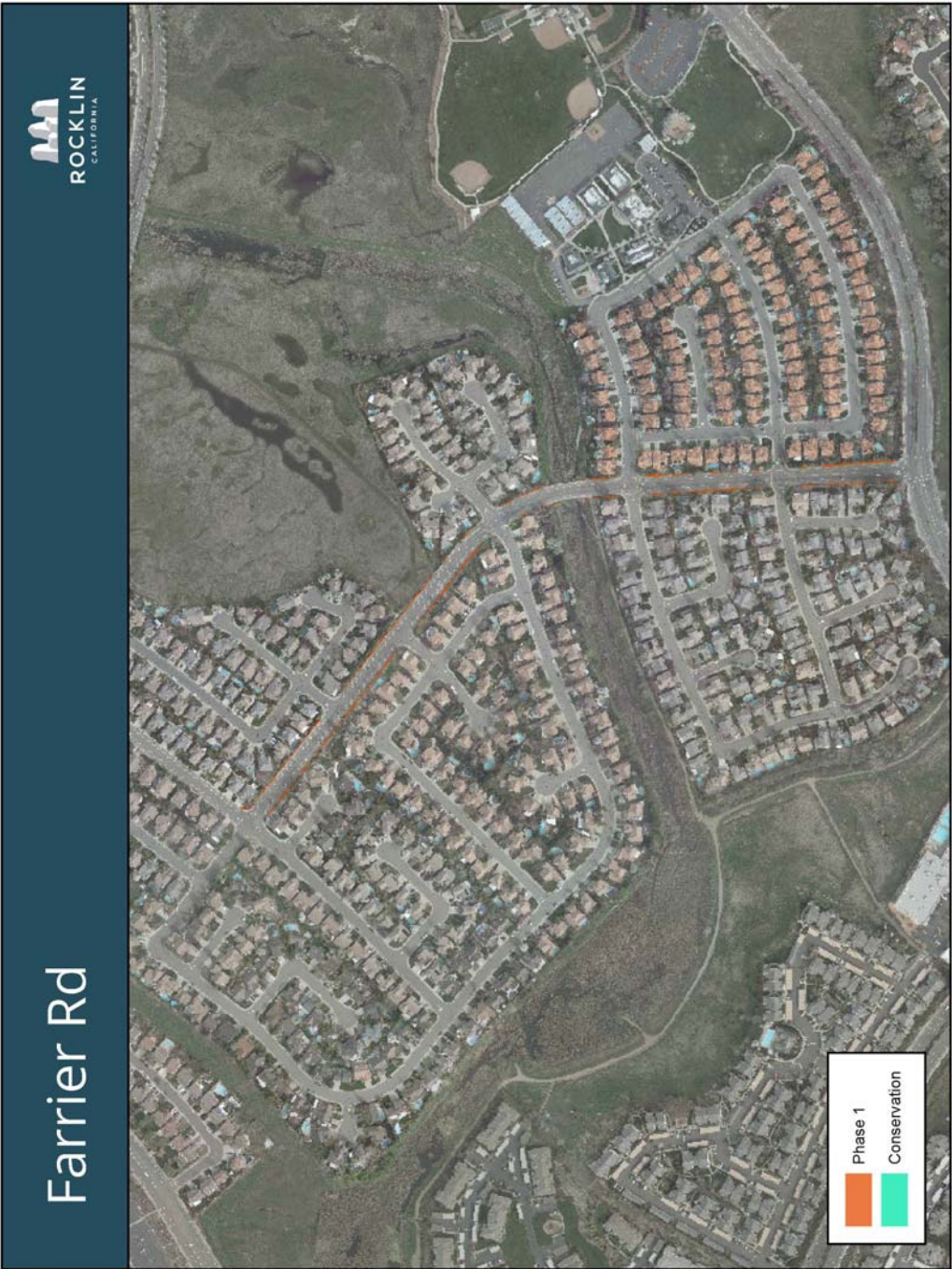
Woodside Park



Corporation Yard



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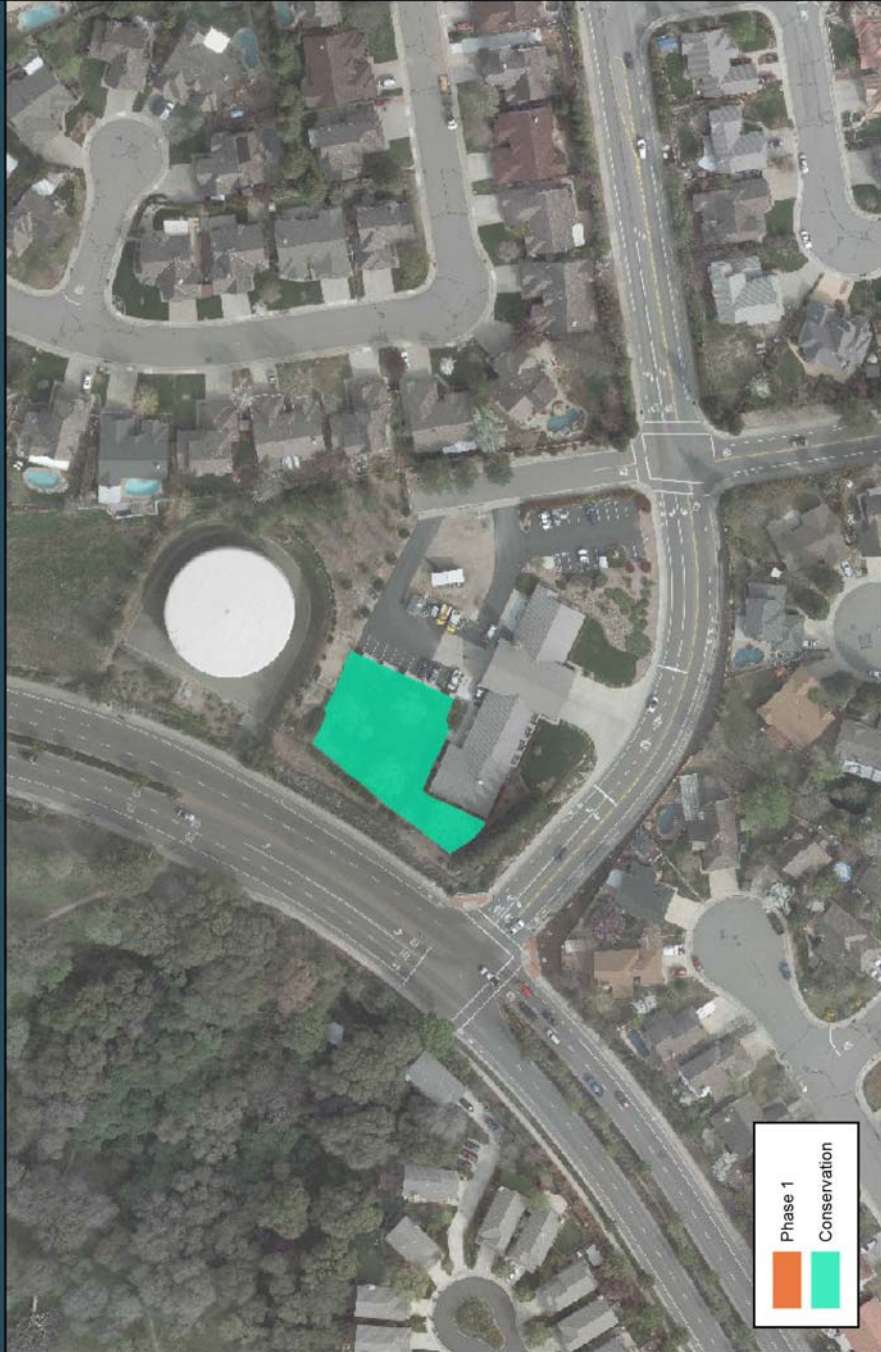


Fire Station 1 and Finn Hall



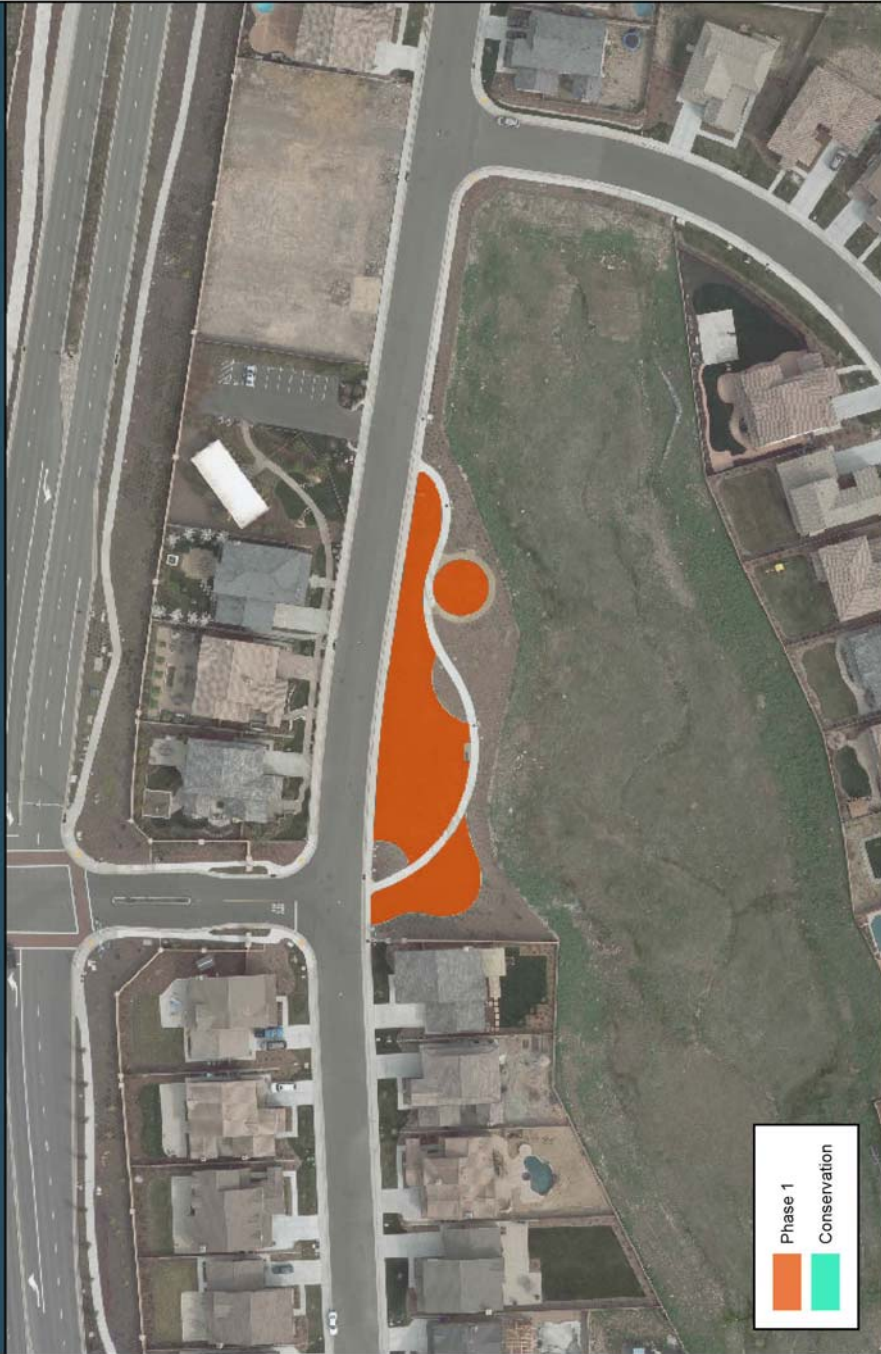
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Fire Station 2



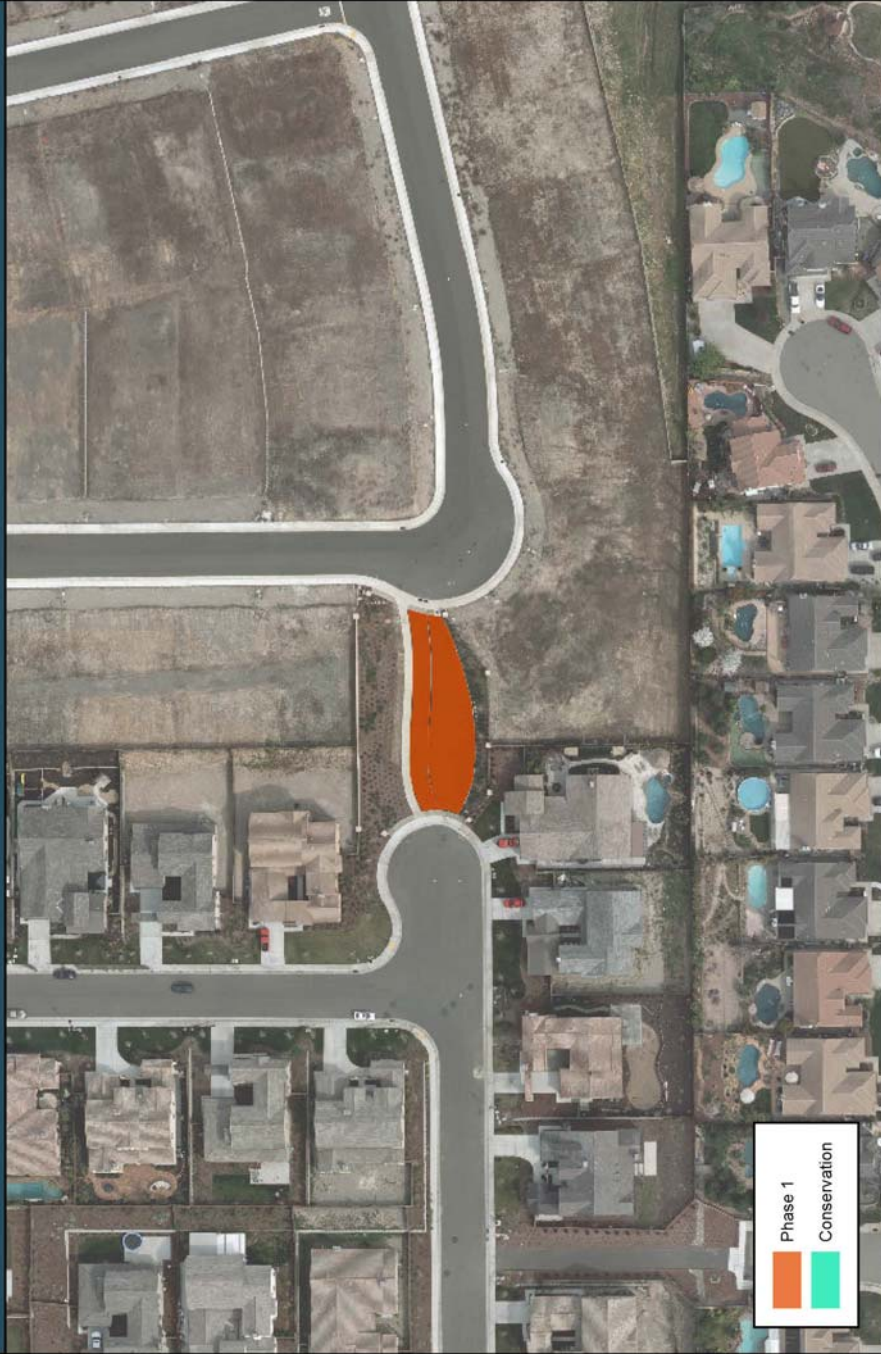
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Pocket Park - Apple Grey Way



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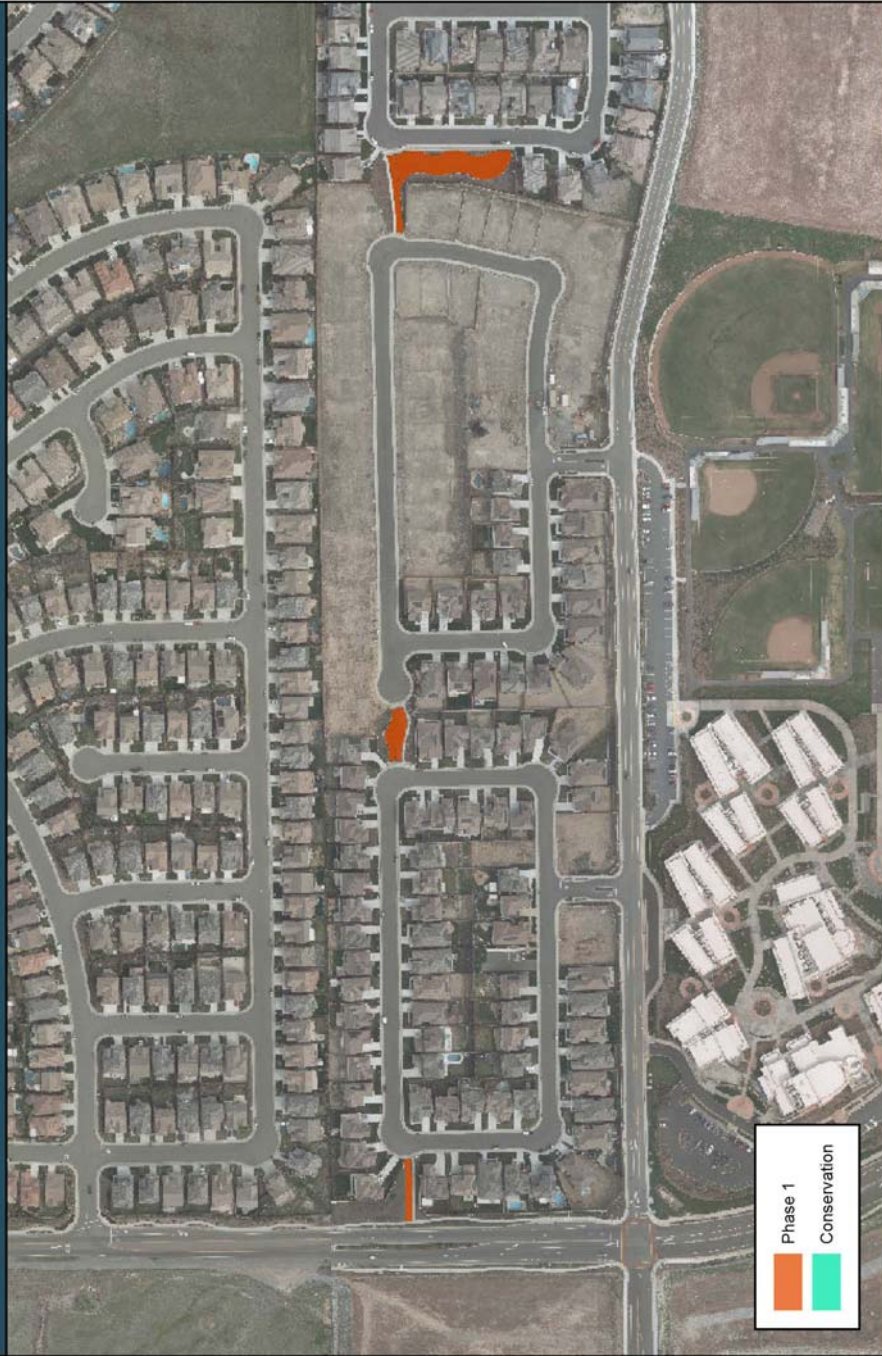
Pocket Park - Sorrell Ct & Anvil Cir



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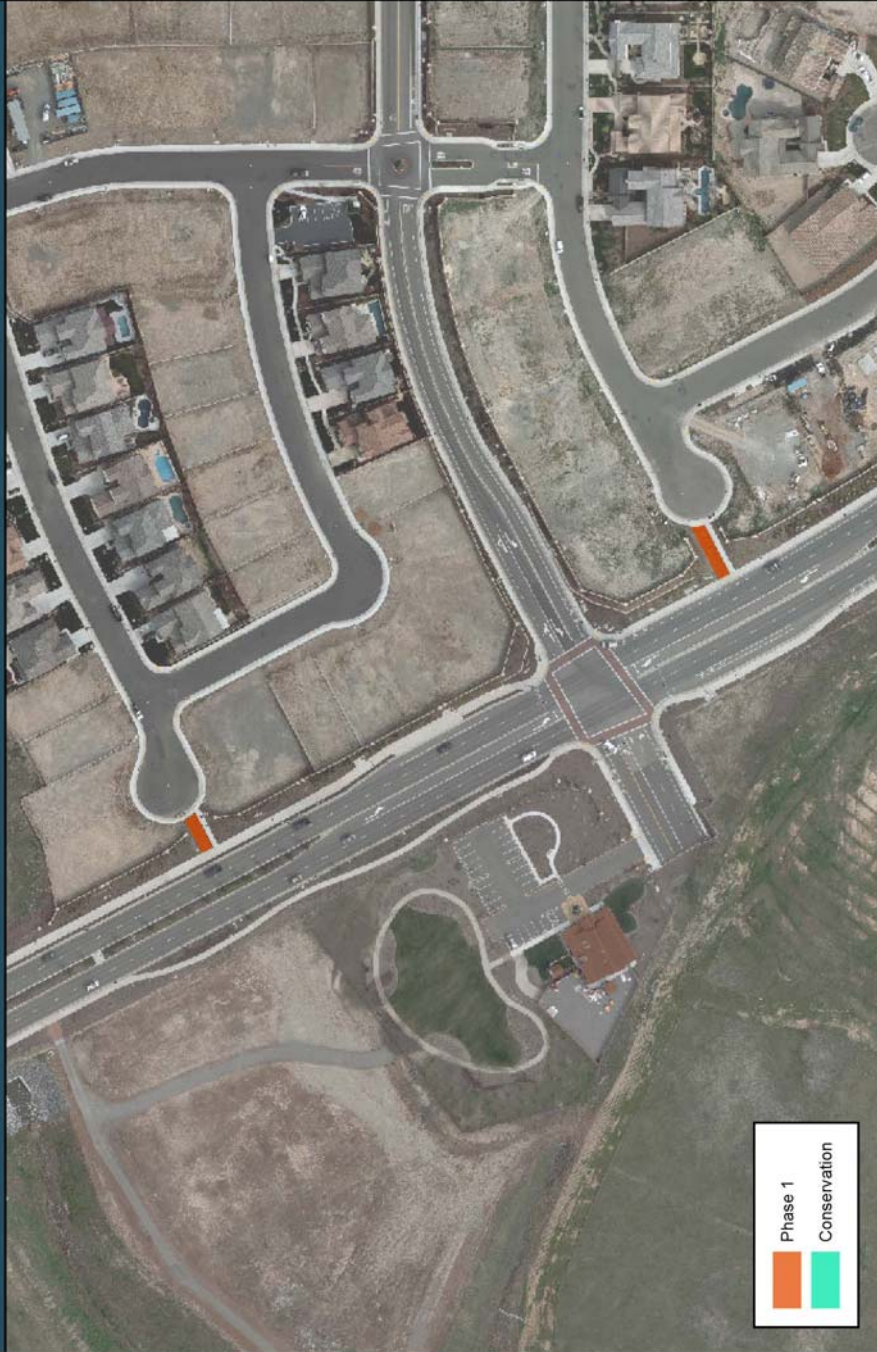


Pocket Parks - Stageline Cir & Abilene Cir



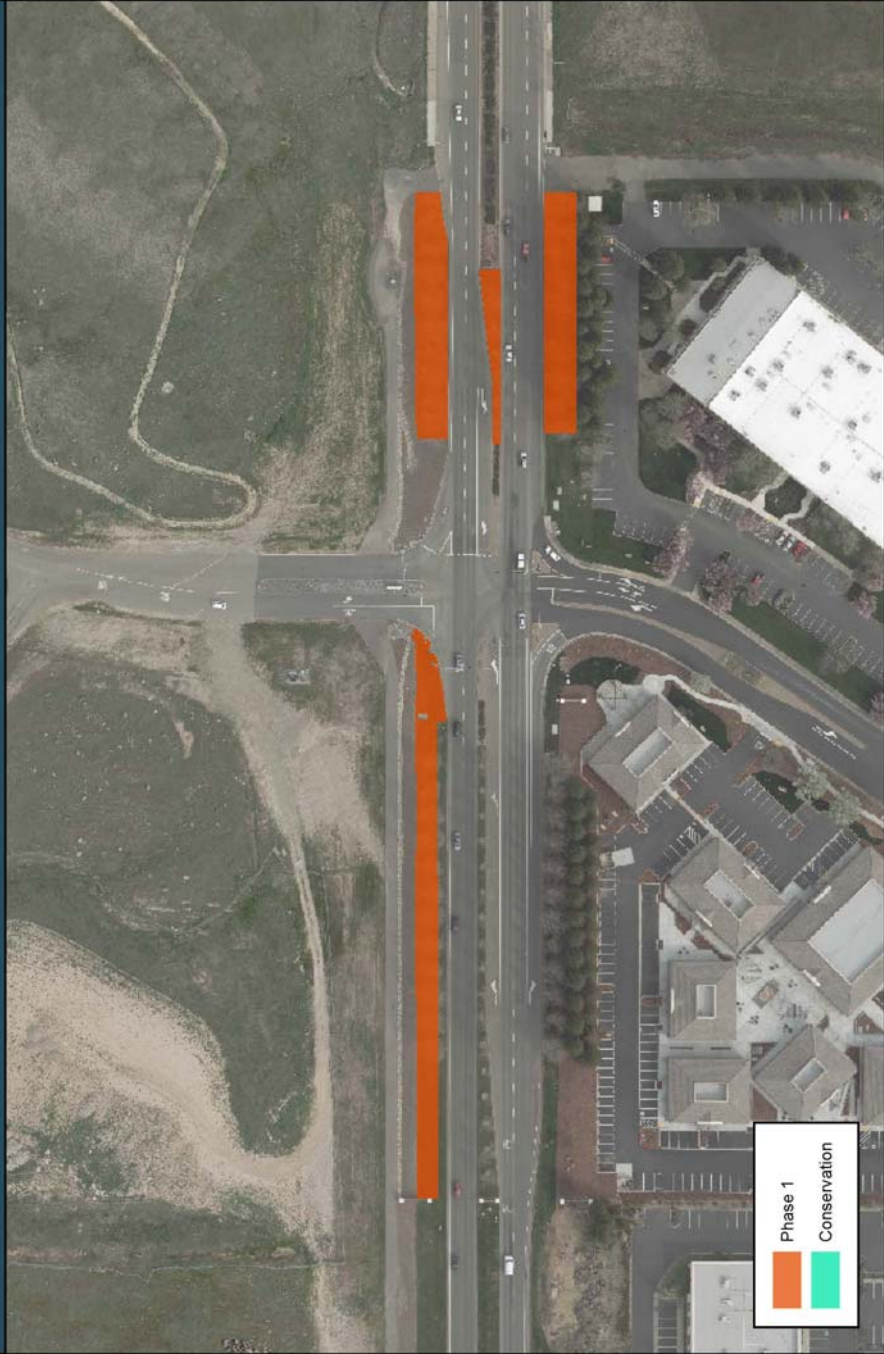
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Pocket Parks - Wildcat Blvd



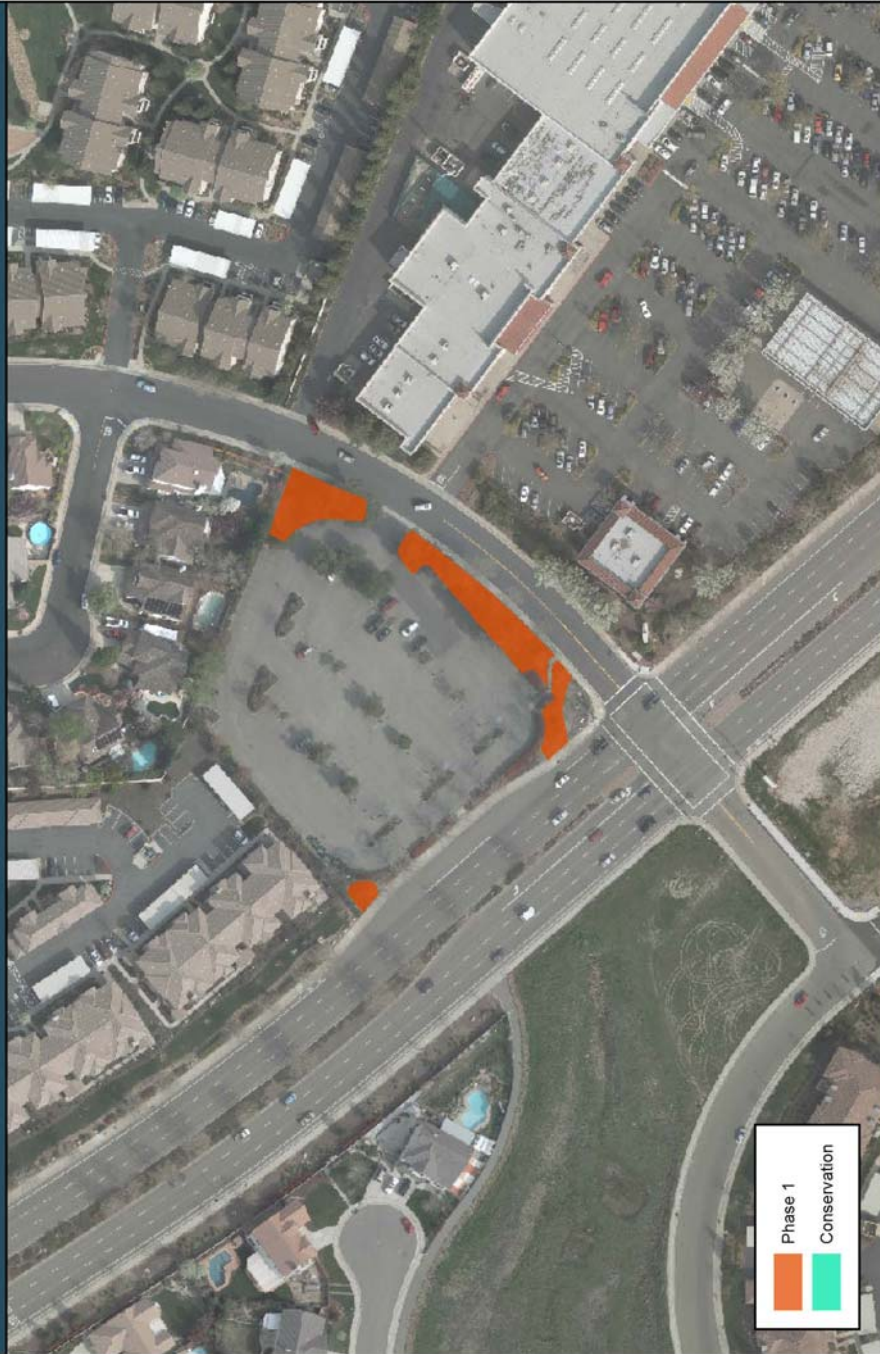
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Sunset Blvd & Atherton Rd



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Sunset Blvd & Pebble Creek Dr



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